REMARKS

The present application relates to hybrid maize plant and seed 38A24. Claims 1-32 are currently pending in the present application. Claims 11, 15, 19, 24, 28 and 32 were amended in the Amendment After Final, submitted October 31, 2001. Applicant respectfully requests consideration of the following remarks.

Detailed Action

The Examiner states that the Amendment After Final submitted on October 31, 2001, in response to the Final Rejection dated July 31, 2001, does not place the application in condition for allowance because Applicant's arguments are duplicative of those previously submitted and addressed.

Applicant respectfully traverses this rejection. Further, there is no mention by the Examiner on whether the newly amended claims submitted on October 31, 2001 are objected to or rejected (Claims 11, 15, 19, 24, 28 and 32). The Examiner only mentions earlier arguments made by Applicant. It is requested that the below-mentioned arguments are not duplicative but rather are a further explanation of the allowability of the original claims and those which have been previously amended. Applicant respectfully requests reconsideration.

Rejections Under 35 U.S.C. § 112, First Paragraph

The Examiner maintains the rejections to claims 1-10, 11 (previously amended), 12-14, 15 (previously amended), 16-18, 19 (previously amended), 20-23, 24 (previously amended), 25-27, 28 (previously amended), 29-31 and 32 (previously amended) under 35 U.S.C. § 112, first paragraph. Applicant respectfully traverses this rejection and again reiterates with regard to deposit of Hybrid 38A24, Applicant wishes to note that:

- during the pendency of this application access to the invention will be afforded to the Commissioner upon request;
- b) all restrictions upon availability to the public will be irrevocably removed upon granting of the patent;
- c) the deposit will be maintained in a public depository for a period of thirty years, or five years after the last request for the enforceable life of the patent, whichever is

longer;

- d) a test of the viability of the biological material at the time of deposit will be conducted (see 37 C.F.R. § 1.807); and
- e) the deposit will be replaced if it should ever become inviable.

Applicant wishes to state that the actual ATCC deposit will be delayed until the receipt of notice that the application is otherwise in condition for allowance. Once such notice is received, an ATCC deposit will be made, and the specification will be amended to contain the accession number of the deposit, the date of the deposit, a description of the deposited biological material sufficient to specifically identify it and to permit examination and the name and address of the depository. The claims will also be amended to recite the ATCC deposit number. In addition, Applicant submits that at least 2,500 seeds of Hybrid 38A24 will be deposited with the ATCC. In light of the above, Applicant respectfully requests the Examiner reconsider and withdraw this rejection.

Rejections Under 35 U.S.C. § 112, Second Paragraph

The Examiner maintains the rejections to claims 1-10, 11 (previously amended), 12-14, 15 (previously amended), 16-18, 19 (previously amended), 20-23, 24 (previously amended), 25-27, 28 (previously amended), 29-31 and 32 (previously amended) under 35 U.S.C. § 112, second paragraph, "as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention." The Examiner notes that the recitation "Hybrid maize seed designated "38A24" in claims 1, 5 and 7, render the claims and those dependent thereon indefinite. The Examiner states the that name "38A24" does not clearly identify the hybrid maize seeds and concludes that amending the claims to recite the ATCC deposit number would overcome the rejection. Applicant respectfully traverses this rejection. Applicant respectfully submits that a deposit will be delayed until notice of otherwise allowable claims as provided under 37 C.F.R. § 1.809. Applicant will refrain from amending the claims until the time of the actual deposit as set forth in 37 C.F.R. § 1.801-1.809. Once notice of allowable claims has been received by Applicant, a deposit will be made with the ATCC and the claims and the specification will be amended to recite the accession number.

Issues Under 35 U.S.C. § 102/103

The Examiner maintains the rejections to claims 11, 15, 19, 24, 28 and 32 from the previous Office Action dated July 31, 2001, under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, as obvious under 35 U.S.C. § 103(a) over Luedtke, Jr. (U.S. Patent No. 5,574,208).

In the previous Office Action, the Examiner noted that claims 11, 15, 19, 24, 28 and 32 (all amended on October 31, 2001) are still taught by Luedtke, Jr. as cultivar 3893 has at least two of the characteristics of the 38A24 listed in the claimed invention. The Examiner concludes that the process of making the claimed plants does not distinguish the plants themselves from those taught by the reference, concluding that the invention was clearly "prima facie" obvious as a whole to one of ordinary skill in the art, if not anticipated by Luedtke, Jr.

Applicant respectfully traverses this rejection and requests reconsideration of claims 11, 15, 19, 24, 28, and 32 (all previously amended). Applicant asserts that in the Advisory Action dated January 17, 2002, no mention was made of the amended claims and therefore Applicant requests reconsideration and explanation is necessary for Applicant to further support their allowability.

Applicant submits that the claims do not simply recite traits, such as a relative maturity of 96, or resistance to Goss's Wilt, or solid resistance to Stewart's Wilt, but instead recites these specific traits only to the extent that they are "38A24" traits; thereby coming solely from the seed/germplasm of 38A24. When looking at maize plants it would be possible for one ordinarily skilled in the art to find many traits that are similar between varieties such as the disease resistance or growth habit. Nonetheless, the claim also recites that the claimed plant must have 38A24 as an ancestor further indicating that these traits <u>must</u> originate from the 38A24 plant. In response to the Examiner's contention that one could not distinguish the claimed plant from the prior art which shows each of these traits, Applicant submits that one can easily tell by reference to the plants breeding history or its molecular profile whether the plant did indeed have plant 38A24 as an ancestor and expressed two or more "38A24" traits. Further, any phenotypic trait that is expressed is a result of a combination of all of the genetic material present in the plant, and 38A24 will have its own unique genetic profile that it will contribute to a breeding program. This unique genetic background will then result in the claimed plant and this profile along with its combination with other plants will result in a unique combined genetic profile that is the

product claimed. The resulting plant will not just have traits, but "38A24" traits which will be a unique combination of genetic material.

Applicant further asserts that although other plants may possess similar traits that does not then make the claimed invention obvious, if not anticipated by Luedtke, Jr. Once again the Applicant would like to point out that the claimed invention of 38A24 and the cited reference of Hybrid 3893 are not the same inventions. Applicant submits that the claimed plant cannot be rendered obvious or lacking novelty, as it possesses a unique combination of traits, which confers a unique combination of genetics. Further, there is no expectation of success that the crossing of the Hybrid 3893 with some yet to be identified plant would yield a plant with two of the traits enumerated in the claimed invention because that particular plant did not begin with the claimed seed 38A24 which is essential. Without any teaching about dominance, or heritability of such traits it cannot be said that there is an expectation of success that the combination of plants would achieve the combination enumerated in the claimed invention, to say nothing of issues such as inbreeding depression etc. Applicant asserts that it is not the phenotypic characteristics alone that are claimed and taught in the instant invention. It is a combination of physiological and morphological characteristics, as claimed, which make the present Hybrid non-obvious and not anticipated over Luedtke, Jr. Additionally, as evidenced in Tables 1-5, several significant differences exist between Hybrid 3893 and 38A24. As shown in Table 4 of the claimed invention (page 29), the comparative relative maturity values and the growing degree units show statistically significant differences from Table 3 of Hybrid 3893 (columns 15-16). Not only are these two hybrids significantly different with respect to many traits, but the genetic profile that is responsible for those differences that each would contribute to a breeding program as ancestors would also be different and unique, as would the descendants. Further, In re Thorpe, states that "a product by process claim may be properly rejected over prior art teaching the same product produced by a different process", as noted by the Examiner. 227 U.S.P.Q. 964, 966 (Fed. Cir. 1985). However, Applicant submits that this is not the same product physiologically or morphologically as the cited prior art as can be evidenced by one skilled in the art through analysis of the data tables in each.

Finally, as discussed above, 38A24 and plants derived from 38A24 are clearly differentiated from 3893. It must be recognized that the 38A24-derived plants are themselves

unusual and a non-obvious result of a combination of previously unknown and non-obvious genetics. In addition to the phenotypic traits described herein, each 38A24-derived plant has an additional benefit unique to each specific cross using 38A24 as one of its ancestors. In addition, it is impermissible to use hindsight reconstruction and the benefit of Applicants disclosure to pick among pieces which are present in the art, there must be some suggestion to make the combination and an expectation of success. In re Vaeck, 20 U.S.P.Q.2d 1434 (Fed. Cir. 1991). Thus, they deserve to be considered new and non-obvious compositions in their own right as products of crossing when 38A24 is used as a starting material.

In light of the above, Applicant respectfully requests the Examiner reconsider and withdraw the rejection to previously amended claims 11, 15, 19, 24, 28 and 32 from the previous Office Action dated July 31, 2001, under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, as obvious under 35 U.S.C. § 103(a) over Luedtke, Jr.

Conclusion

Applicant submits that, in light of the foregoing remarks, the claims are in condition for allowance. Reconsideration and early notice of allowability are respectfully requested.

No fees or extensions of time are believed to be due in connection with this amendment; however, consider this a request for any extension inadvertently omitted, and charge any additional fees to Deposit Account No. 26-0084.

Reconsideration and allowance is respectfully requested.

Respectfully submitten

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